ABSTRACT OF THE DISCLOSURE

A standby generator integration system for efficiently integrating one or more standby generators into an operational power grid. The standby generator integration system includes a control center in communication with a plurality of control units. Each of the control units are in communication with a standby generator, the power grid and a contactor unit. The control unit calculates the hard minimum of the grid voltage and the generator voltage where switching is desired by summing the rectified voltages together. The control unit then initiates the closing of the contactor unit to bring the standby generator online with the power grid.